

REMARKS

After the foregoing Amendment, claims 1-4, 6 - 7; 9 - 10 and 43 are currently pending in this application. Claims 11 - 42 have been withdrawn from consideration. Claims 1 and 6 have been amended, claims 5 and 8 have been cancelled without prejudice, claim 43 is new. Applicant submits that no new matter has been introduced into the application by these amendments.

Claim Rejections - 35 USC § 102

Claims 1 - 4 and 8 were rejected in the Action under 35 U.S.C. § 102(e)(1) as anticipated by U.S. Patent No. 6,283,557 to Okajima et al. The Action states:

Claims 1-4, 8 are rejected under 35 U.S.C. § 102(e)(1) as being anticipated by Okajima et al. (US 6,283,557 B1). Okajima et al discloses a bicycle wheel rim (24), comprising an inner peripheral wall (64), an outer peripheral wall (66) two lateral walls (54) joining said peripheral walls and two circumferential wings (62), for anchoring a tire, which extend outwards from the two sides of the outer peripheral wall, wherein said rim is made of a single part of structural fiber based material incorporating the two circumferential wings as disclosed in col, 7, lines 22-28. The structural fiber being carbon fiber in accordance with claim 2. The rim comprising a symmetrical cross section and an asymmetrical

cross-section depending on the axis considered in accordance
with claims 3-4.

Applicant respectfully traverses the rejection. Claim 1 has been amended to include the subject matter of claim 5 and recites a bicycle wheel rim, comprising an inner peripheral wall, an outer peripheral wall, two lateral walls joining said peripheral walls and two circumferential wings, for anchoring a tire, which extend outwards from the two sides of the outer peripheral wall, wherein said rim is made of a single part of structural fiber based material incorporating the two circumferential wings and wherein the rim has a layered structure of fiber based fabric material, including at least first layers extending so as to contribute to define the inner wall, the lateral walls and the two wings of the rim, and second layers arranged so as to contribute to define the inner, lateral and outer walls of the rim.

Claim 9 recites a bicycle wheel rim, comprising an inner peripheral wall, an outer peripheral wall, two lateral walls joining said peripheral walls and two circumferential wings, for anchoring a tire, which extend outwards from the two sides of the outer peripheral wall, wherein said rim is made of a single part of structural fiber based material incorporating the two circumferential wings, and wherein the rim has a layered structure of fiber based fabric material, including at least first layers extending so as to contribute to define the inner wall, the lateral

walls and the two wings of the rim and second layers arranged so as to contribute to define the inner, lateral and outer walls of the rim.

Claim 10 recites a bicycle wheel rim, comprising an inner peripheral wall, an outer peripheral wall, two lateral walls joining said peripheral walls and two circumferential wings, for anchoring a tire, which extend outwards from the two sides of the outer peripheral wall, wherein said rim is made of a single part of structural fiber based material incorporating the two circumferential wings, wherein the rim has a layered structure of fiber based fabric material, including at least first layers extending so as to contribute to define the inner wall, the lateral walls and the two wings of the rim and second layers arranged so as to contribute to define the inner, lateral and outer walls of the rim, and wherein the layered structure further includes third layers arranged to define the outer wall and the two wings of the rim.

Claim 43 recites a bicycle wheel rim comprising: a multilayer, unitary structure formed of fiber based fabric incorporated in a thermosetting plastic material matrix having: an inner wall; an outer wall; two circumferential wings; and two lateral walls that connect the inner wall, outer wall and two circumferential wings, wherein the outer wall is formed of a first set of selected layers that are also part of the inner and lateral walls and the two circumferential

wings are formed of a second set of differently selected layers that are also part of the inner and lateral walls.

Okajima teaches a bicycle rim with a wear indicator that indicates wear of each side of the bicycle rim. Okajima merely mentions that "rims 24 can be constructed of any suitable metallic material, such as plated steel, stainless steel, aluminum, magnesium or titanium, as well as other non-metallic materials, such as a carbon fiber composite." There is no teaching in Okajima however, that the rim is made of a single part of structural fiber based material incorporating the two circumferential wings and wherein the rim has a layered structure of fiber based fabric material, including at least first layers extending so as to contribute to define the inner wall, the lateral walls and the two wings of the rim, and second layers arranged so as to contribute to define the inner, lateral and outer walls of the rim as is claimed in amended claim 1. Okajima also fails to teach that the rim has a layered structure of fiber based fabric material, including at least first layers extending so as to contribute to define the inner wall, the lateral walls and the two wings of the rim and second layers arranged so as to contribute to define the inner, lateral and outer walls of the rim as is claimed in claim 9. There is also no teaching in Okajima that the rim has a layered structure of fiber based fabric material, including at least first layers extending so as to contribute to define the inner wall, the lateral walls and the two wings of the rim and second layers arranged so as to

contribute to define the inner, lateral and outer walls of the rim, and wherein the layered structure further includes third layers arranged to define the outer wall and the two wings of the rim as is claimed in claim 10. Finally, Okajima does not teach that the outer wall is formed of a first set of selected layers that are also part of the inner and lateral walls and the two circumferential wings are formed of a second set of differently selected layers that are also part of the inner and lateral walls as is claimed in claim 43.

Reconsideration and withdrawal of the § 102 rejection are respectfully requested.

Claim Rejections - 35 USC § 103

Claims 5 - 7 were rejected in the Action as obvious over Okajima in view of Lew et al (US 6,347,839 B1). The Action states:

Okajima et al teach all the limitations of claims 5-7 except for a bicycle wheel rim comprising multiple layers of fiber base material. The general concept of constructing a bicycle wheel rim of multiple layers of fiber base material is well known in the art as illustrated by Lew et al which disclose the teaching of constructing a bicycle wheel rim of multiple layers of fiber, base material. It would have been obvious to one of ordinary skill in the art as [sic] the time of the invention to modify Okajima et al to include the use of multiple layers of fiber base material to

construct his advantageous bicycle wheel as taught by Lew et al in order to achieve a rim having a weight that is comparable to an aluminum rim and is as strong as a steel rim as disclosed in the abstract.

Claims 9 - 10 were rejected in the Action as obvious over Okajima in view of Lew et al (US 6,347,839 B1) and McHugh (US 3,362,451). The Action states:

Okajima et al teach all the limitations of claims 9-10 except for a bicycle wheel rim comprising multiple layers of fiber base material. The general concept of constructing a bicycle wheel rim of multiple layers of fiber base material is well known in the art as illustrated by Lew et al which disclose the teaching of constructing a bicycle wheel rim of multiple layers of fiber base material. Also, the general concept of using fiber base fabric material in a wheel rim is well known in the art as illustrated by McHugh which disclose the teaching of fabric fiber in a wheel rim, see col 1, lines 70-73. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Okajima et al to include the use of fiber fabric material in advantageous bicycle wheel rim as taught by Coran et al in order to take advantage of the high tensile strength of the fiber to achieve sufficient resilient strength and rigidity to support substantial radial and axial static and shock loads as disclosed in col 2, lines 1-3. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Okajima et al to include the use of multiple layers of fiber base material to construct his advantageous bicycle wheel as taught by Lew et al

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in order to achieve a rim having a weight that is comparable to an aluminum rim and is as strong as a steel rim as disclosed in the abstract.

Since the Okajima reference is believed to be no longer relevant in view to the amendment to claim 1 and the above arguments, Applicant believes that claims 6-7 and 9-10 are also allowable. Withdrawal of the § 103 rejection is respectfully requested.


It is believed that the claims presented by this amendment are allowable and a Notice of Allowance is respectfully requested. Should the Examiner believe that an interview would advance the prosecution of the application, the Examiner is invited to contact the undersigned at the Examiner's convenience.

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In view of the foregoing amendment and remarks, Applicant respectfully submits that the present application, including claims 1-4, 6 - 7, 9 - 10 and 43, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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